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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,839	10/24/2001	Neil McClure	392902	6338
30955	7590	11/10/2005		
LATHROP & GAGE LC 4845 PEARL EAST CIRCLE SUITE 300 BOULDER, CO 80301			EXAMINER GRAYSAY, TAMARA L	
			ART UNIT 3623	PAPER NUMBER

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/074,839	MCCLURE, NEIL	
	Examiner	Art Unit	
	Tamara L. Graysay	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1, 5-10, and 14-22, 24, 28-31, and 34-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa (US-5377099) in view of Miller (article, The impact of candidate name order on election outcomes).

Regarding claims 1, 15, 16, 17, and 43, Miyagawa discloses an electronic voting system including a memory storage device (13) containing ballot information (31) including a plurality of ballot options for a contest (candidates a, b, ...n); a voting station (2) including an electronically configurable ballot information presentation device (5) and voter input device (3).

Miyagawa lacks a ballot rotation engine operable to change the order of ballot options according to a predetermined schema for additional voting sessions.

Miller teaches randomized name order on a ballot including upward rotation sequencing (p.325, fourth and fifth paragraphs) and of full randomization (p.317, last paragraph, first sentence). Miller teaches that full randomization or other not strictly random sequencing helps avoid voter bias caused by the order in which candidates' names appear on the ballot. Applicant has not disclosed the ballot rotation engine with any particularity. The examiner takes Official notice that a person of ordinary skill in the computer science art would know how to make a ballot rotation engine that would select the order of candidates on a ballot in a random manner, whether fully randomized, upward sequencing, or downward sequencing.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Miyagawa to include a ballot rotation engine for changing the order of the ballot options, such as suggested by Miller, in order to avoid voter bias based on the order in which candidates' names appear on a ballot.

Regarding claim 5, a plurality of contests each having a plurality of candidates is taught in Miller (for example, p.292, first full paragraph).

Regarding claims 6-7, changing the ordering schema of selected ones of the plurality of contests would have been within the level of ordinary skill in the art for example it is inherent in the combination that where only one candidate is running, then there is no need to change the order of candidates.

Regarding claims 8-9, the claims are directed to nonfunctional descriptive material and are thus not given patentable weight in the system claims because the nonfunctional descriptive material does not structurally define over the Miyagawa and Miller combination.

Regarding claim 10, Miyagawa includes a visual display (e.g., figures 1, 9-14).

Regarding claim 14, the element 3 is a voter directed ballot navigation tool, as broadly recited insofar as the voter uses element 3 to navigate the ballot on the display device 2.

Regarding claim 18, whether the rotation is upward or downward rotation is a matter of design choice within the level of ordinary skill in the art. Given that the Miller reference suggests randomization, including a sequential iteration of moving the top listed candidate to the bottom, it would have been obvious to one of ordinary skill to sequence the names by moving the

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bottom listed candidate to the top. There is no unexpected result, merely accomplishing the same result in a different manner, i.e., opposite direction.

Regarding claim 19, Miller mentions rotation of ballot names at the precinct level (for example, p.325, top of page).

Regarding claim 20, Miller mentions rotation of ballot names at the jurisdiction level (for example, p.325, first full paragraph includes county, city, and township in addition to precinct level).

Regarding claim 21, Miller has presented information that supports statistically insignificant influence to the voting results using the random ballot name order (for example, p.308, -310).

Regarding claim 22, Miller mentions equal number of rotations for each candidate in all positions insofar as the precincts are numbered according to the number of candidates so that each candidate is first an equal number of times, as close as mathematically possible (for example, p.325-326).

Regarding method claims 24, 28-31, and 34-42, the process steps are taught or suggested by the Miyagawa and Miller combination as noted with regard to claims 1, 5-7, 10, and 14-22 respectively.

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3. Claims 2-4, 13, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa (US-5377099) and Miller (article, The impact of candidate name order on election outcomes) as applied to claim 1 above, and further in view of Graft (US-5278753).

Regarding claims 2-4, Graft teaches an electronic voting system having a network of precinct control units (14) and a plurality of voting stations (12). The teaching from the Graft reference is an electronic voting system that includes a plurality of voting stations and a network, as broadly recited, that allows cooperation and interconnection of the voting stations. In Graft the computing unit (18) contains the information about precinct ballots and candidates, such that it is downloaded to the voting stations prior to the election and voting is tabulated at the computing unit (18). The electronic voting system is networked insofar as the elements are operable together as a complete electronic voting system to enable counting of the votes in a consistent manner to avoid duplicate counting or inaccuracies in counting.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Miyagawa and Miller combination to include a network of precinct control units and voting stations, in order to count the votes in a consistent and more accurate manner.

Further regarding claim 4, the examiner notes that balancing the candidate order on the ballots is mentioned in the base reference Miller (p.319, second paragraph).

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Regarding claim 13, Graft teaches a manual switch (34) to confirm the voter input. A switch is useful to ensure accurate counting of the votes by the poll worker, in other words the poll worker confirms or finalizes the voter input when the manual switch is operated.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Miyagawa and Miller combination to include a manual switch, such as taught by Graft, in order to have the poll worker confirm or finalize the voter input.

Regarding method claims 25-27, the process steps are taught or suggested by the Miyagawa, Miller, and Graft combination as noted with regard to claims 2-4, respectively.

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4. Claims 11 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa (US-5377099) and Miller (article, The impact of candidate name order on election outcomes) as applied to claims 1 and 24 above, and further in view of Willard (US-5821508).

Regarding claim 11, Willard teaches an audio output device associated with an electronic voting system to accommodate unassisted voting by a visually impaired voter.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the voting stations of the Miyagawa and Miller combination to include an audio speaker, such as taught by Willard in order to accommodate unassisted voting by a visually impaired voter.

Regarding method claim 32, the process steps are taught or suggested by the Miyagawa, Miller, and Willard combination as noted with regard to claims 11.

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5. Claims 12 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa (US-5377099) and Miller (article, The impact of candidate name order on election outcomes) as applied to claim 1 above, and further in view of Lane Poor (US-2002/0161628).

Regarding claim 12, Lane Poor teaches Braille output for an electronic voting system. The Braille device is used in addition to or instead of a computer display or auditory display in order to accommodate a voter who is visually impaired.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the voting stations of the Miyagawa and Miller combination to include a Braille printer, such as suggested by Willard's Braille output device, in order to accommodate unassisted voting by a visually impaired voter.

Regarding method claim 33, the process steps are taught or suggested by the Miyagawa, Miller, and Lane Poor combination as noted with regard to claims 12.

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6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa (US-5377099) and Miller (article, The impact of candidate name order on election outcomes) as applied to claim 1 above, and further in view of Roth (US-6266060).

Roth teaches, generally, a table for retrieving data (for example, information is retrieved according to a mapping structure that locates a menu record, see figure 9, and 11:18-33). The use of lookup tables is a common database management technique that organizes data. The use of lookup tables increases data retrieval accuracy and speed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the memory of the Miyagawa and Miller combination to include a look-up table, such as suggested by Roth, in order to retrieve information from the memory more accurately and quickly.

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Conclusion


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hammond (US-3653587) teaches an electronic voting system for counting ballots and printing out results.
- DePhillipo (US-4015106) teaches an electronic voting system including a memory, a display panel, and a printer.
- McClure (US-6250548) teaches an electronic voting system network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara L. Graysay whose telephone number is (571) 272-6728. The examiner can normally be reached on Mon - Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tamara L. Graysay
Examiner
Art Unit 3623

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